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Steve Knizer, Acting Director Toxics Release Inventory Program U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Mail Code: 2841T Washington, D.C. 20460

Re: Petition to Add the Oil and Gas Extraction Industry, Standard Industrial

Classification Code 13, to the List of Facilities Required To Report under the

Toxics Release Inventory, Docket ID No. EPA-HQ-TRI-2013-0281

Dear Acting Director Knizer:

On October 24, 2012, the Environmental Integrity Project (EIP) filed a petition ("Petition") requesting that the Environmental Protection Agency (EPA) add the oil and gas extraction industry to the list of industry sectors whose facilities are required to report to the Toxics Release Inventory (TRI). We filed the Petition on behalf of sixteen national, regional, and local organizations located and working in communities where the industry currently releases toxic chemicals to the environment or has proposed to do so in the near future.

On behalf of the following organizations—Center for Effective Government (formerly OMB Watch), Chesapeake Climate Action Network, Citizen Shale, Clean Air Council, Clean Water Action, Delaware Riverkeeper Network, Earthworks, Environment America, Environmental Advocates of New York, Natural Resources Defense Council, PennEnvironment, San Juan Citizens Alliance, and Texas Campaign for the Environment—we are now submitting the attached compilation of emissions data from facilities within the oil and gas extraction industry for inclusion in EPA's regulatory docket for the Petition, Docket ID No. EPA-HQ-TRI-2013-0281. The attached data provides further evidence that the oil and gas extraction industry should be added to the list of industry sectors required to report to the TRI.

As explained further below, 199 facilities in just six states reported releasing more than 10,000 pounds of a TRI-listed chemical to the atmosphere in each of the most recent two years for which data was available. The data is based on emission inventory reports submitted to Colorado, Louisiana, North Dakota, Pennsylvania, Texas, and Wyoming, six states that have seen a rapid expansion in oil and gas exploration in recent years. These emissions typically represent only about one to two percent of the actual throughput of toxic chemicals at these sites, which are likely to exceed 500,000 to 1 million pounds a year. As you are aware, chemical plants, refineries, and other industries must report emissions to TRI for any chemical that is

"manufactured, used, or otherwise processed" in amounts between 10,000 to 25,000 pounds annually. The facilities identified in this report will obviously far exceed that threshold.

It is our understanding that the largest issue for EPA in considering the addition of the industry is how the industry's smallest units—such as wells—would fit with the definition of "facility." While this is a valid consideration, and one that we have discussed in the Petition and in our meeting with EPA, the attached data demonstrates that there are no such technical obstacles to reporting emissions from hundreds of the industry's large and clearly defined facilities, such as processing plants and compressor stations.

The attached data also provides useful evidence in favor of the industry's addition based on the fact that sources of the data—the National Emissions Inventory and state emissions inventories—are no substitute for the data and information provided by the TRI. As discussed in detail below, the inventories fall short of the TRI on the basis of quality, quantity, and ready access to the public.

For these reasons, we believe there to be little question that the oil and gas extraction industry is an excellent candidate for addition to the TRI.

1. The TRI's Factors for Addition of an Industry Sector

As reviewed in our Petition, EPA considers three primary factors in deciding whether to add an industry to the TRI:

- (1) Whether TRI-listed chemicals are reasonably anticipated to be present at facilities in the candidate industry group (the "chemical" factor);
- (2) Whether facilities manufacture, process, or otherwise use these chemicals (the "activity" factor); and
- (3) Whether facilities can reasonably be anticipated to increase the information made available pursuant to the TRI or otherwise further its purposes (the "information" factor). ³

Under the chemical and activity factors, the inquiry is more or less the same. That is, under the chemical factor, "EPA will consider evidence indicating that facilities within an industry group are reasonably anticipated to have involvement with one or more EPCRA section 313 listed toxic chemicals as part of its routine operations." And under the activity factor, EPA considers whether facilities within the candidate industry group manufacture, process, or otherwise use one or more TRI chemicals. The line between having involvement with TRI-listed chemicals and using them in some form is a fine one, so the factors can be considered together.

As we laid out in our Petition, there is little question that the oil and gas extraction industry has involvement with and uses a large variety of chemicals listed under the TRI throughout its processes. In fact, in the original 1996 rulemaking, EPA found this to be

the case, stating that the industry "conduct[s] significant management activities that involve EPCRA section 313 chemicals." For this reason, although the attached data clearly demonstrates both the chemical and activity factors, the main focus is on the information factor.

Under the information factor, "EPA will consider any information that bears on whether reporting by facilities within the candidate industry group could reasonably be anticipated to increase the information made available pursuant to EPCRA section 313, or otherwise further the purposes of EPCRA section 313." Relevant considerations under the information factor include (1) whether facilities within the industry will meet the chemical and employee thresholds for reporting and (2) the quality and quantity of information currently available to the public.⁸

In presenting the attached emissions data, we primarily intend to focus on the threshold component of the information factor and demonstrate that there are hundreds of facilities that have met TRI reporting thresholds and will report to the TRI. But we also note that the varying data sources address the second consideration in regard to quality and quantity of data: reporting was not annual in all sources, not of consistent quality, and not readily available to the public.

2. Hundreds of Facilities in the Six States Will Meet the TRI's Reporting Thresholds

As demonstrated in the attached data, the six states examined contain 199 facilities in the oil and gas extraction industry that emitted over 10,000 pounds of a TRI-listed chemical for at least two consecutive years between 2008 and 2012. Including facilities that emitted over 10,000 pounds of a TRI-listed chemical for just one year, the number of facilities jumps to 395. Of the six states, Texas contained the vast majority of these facilities, followed by Colorado.

Table 1: Fac	cilities Emitting ov	er TRI Reporting	Thresholds in	the States Investigated

State	Facilities Emitting >10,000 lbs for 2 Consecutive Years	Facilities Emitting >10,000 lbs in at least 1 Year
Texas	90	209
Colorado	88	124
Louisiana	14	34
Wyoming	5	14
North Dakota	1	1
Pennsylvania ¹¹	1*	13*
Total	199	395

^{*}For most Pennsylvania facilities, only 2011 data was available.

If only these facilities reported to the TRI, a significant amount of information would be made available to the public. Moreover, it is important to consider that the data presents only *emissions* of TRI-listed chemicals, while the proper measure for the TRI chemical threshold is the amount of a chemical that a facility "otherwise uses"—i.e., the throughput amount rather than the amount ultimately emitted to the atmosphere. ¹² For each of the TRI-listed chemicals in the spreadsheet, the throughput amount is certainly much higher than the amount emitted.

Because facility employee counts are not included in the National Emissions Inventory or state inventories, we do not state with certainty that each of the facilities included in the attached data have ten or more full-time employee equivalents. But searching publicly available information for a handful of the facilities demonstrates that many will comfortably exceed the employee threshold. For example, Southern Union Gas Services' Keystone Gas Plant in Texas has 32 full-time employees; DCP Midstream's Pegasus Gas Plant in Texas has 30 full-time employees; Colorado Interstate Gas Company's Rawlins Plant in Wyoming has 22 full-time employees; Enterprise's Meeker Plant in Colorado has 36 full-time employees; and Discovery Producer Services' Larose Plant in Louisiana has 35 full-time employees. Thus, it appears that the large processing facilities that surpass the chemical threshold will also surpass the employee threshold.

Additionally, there is no question that each of the facilities presented in the attached data is, in fact, a "facility" for the purposes of making these threshold determinations. As we discussed in the Petition, one of EPA's reasons for deferring addition of the oil and gas extraction industry in 1996-97 was how to define the smallest component of "facility" in the industry, and whether such a facility would meet the reporting thresholds. But as self-identified facilities under the Clean Air Act, it is clear that all of the facilities in the attached data are, in fact, TRI "facilities" that meet the relevant thresholds.

In fact, we found that six of the facilities in the attached data already have reported to the TRI for the 2012 Reporting Year. ¹⁹ This is apparently due to the SIC codes' historical classification of the recovery of sulfur from natural gas under SIC Code 2819, which is one of the manufacturing SIC codes covered by the TRI from its enactment. ²⁰ But this is also an inherent aspect of the natural gas "sweetening" process, which is very clearly part of the oil and gas extraction industry, ²¹ and which the NAICS Association apparently recognized in reclassifying as part of NAICS Code 211112 (Natural Gas Liquid Extraction). ²² Perhaps because of the confusing nature of this provision, five of the six facilities that reported to the TRI *only* reported their releases of hydrogen sulfide and only began reporting in Reporting Year 2012. It is possible that the facilities read the provision only to require reporting of TRI-listed chemicals from the sulfur-extraction process, but not one of the facilities is solely a sweetening facility.

This peculiarity of the TRI demonstrates in a nutshell the arbitrariness between requiring certain industry sectors to report based on SIC and NAICS Codes while exempting others. For example, NAICS Code 325110 (Petrochemical Manufacturing), which covers steam "cracking" to produce ethylene from hydrocarbon feedstock, must report, while NAICS Code 211112 (Natural Gas Liquid Extraction), which covers the fractionation and extraction of natural gas liquids prior to cracking, need not. Both types of facilities use TRI-listed chemicals in their separation of components from hydrocarbon feedstocks, but one is covered by the TRI simply because of someone's choice of cutoff between the industrial codes. Similarly, there is very little to distinguish tank farms located at petroleum bulk terminals (NAICS 424720) or petroleum refineries (NAICS 324110), which must report, from tank batteries within the oil and gas extraction industry, which need not. The current distinctions are arbitrary, confusing, and as a result ignore a large share of toxic chemical releases.

In short, for much of the oil and gas extraction industry, there is little reason to decline its addition to the TRI. Its large components, such as processing plants, are clearly "facilities" for the purposes of EPCRA section 313, will be able to report easily, and are functionally and chemically very similar to facilities that already must report to the TRI. Even if EPA decides to hold off on the addition of the very smallest facilities in order to further consider how they should be defined, many hundreds of large facilities would report immediately without question should the industry be added to the TRI.

3. The Information Provided by the State Emissions Inventories Falls Far Below the Ouality and Quantity of the TRI

As noted above, the quality and quantity of information currently available to the public is another important consideration under the information factor. The fact that TRI reporting would provide better information than what is already available to the public weighs strongly in favor of adding an industry sector to the TRI. As we discovered in researching the state emissions inventories, the information made available by the state emissions inventories falls short of information that would be provided by TRI reporting in several important ways.

First, unlike the TRI, not all state emissions inventories are annual. For example, Wyoming only inventories emissions from oil and gas production sites every three years as part of Wyoming's Triennial Minor Source Emission Inventory, though some sites may report annually depending on their location. As of the time we accessed the information in November 2013, the most recent inventory data available that included oil and gas production sites was 2008. Second, not all emissions inventories actually include emissions from the oil and gas extraction industry. As discussed in the endnote to Table 1 above, Pennsylvania just recently began to require reporting for facilities in the industry, and only as an inventory separate from Pennsylvania's overall state inventory and not included in the National Emissions Inventory. 25

Third, unlike the TRI, not all state inventories require the reporting of individual chemical quantities. In addition to its Triennial Minor Source Emission Inventory, Wyoming has reports of "actual emissions," but emissions of toxic chemicals are reported in the aggregate as hazardous air pollutants rather than as individual chemicals. Fourth, as discussed above, while TRI reporting is based on the amount of chemicals used and includes all environmental media of release and disposal, emissions inventories are by their nature limited only to those chemicals ultimately released as emissions. No matter the original chemical throughput or the destination of the chemicals other than to the atmosphere, the public only learns one piece of the story from emissions inventories. Fifth, while TRI reporting is clearly labeled by SIC and/or NAICS codes so as to be searchable by a particular industry sector—for example, the oil and gas extraction industry—certain state emissions inventories do not provide such codes. For example, neither North Dakota nor Louisiana data contained NAICS or SIC codes for each facility.

Sixth, while the TRI makes its information available to the public online in a searchable and downloadable format, this is not the case with all the state emissions inventories we researched. For example, we were required to submit a written request and payment of \$30 to obtain Colorado's emissions inventory data, a written request to obtain more comprehensive facility-level emissions data from Pennsylvania, and a written request and payment of \$50 to

obtain Texas's emissions inventory data.²⁷ If these facilities were required to report to the TRI, the public could obtain this data online for free without any delay.

4. Conclusion

We anticipate that the information provided in this letter and the attached spreadsheet will assist EPA in making its important decision whether to add the oil and gas extraction industry to the list of facilities required to report to the TRI. As we have discussed and provided in the attached data, the oil and gas extraction industry contains large facilities that very clearly use and release toxic chemicals above the reporting thresholds; have full-time employees above the threshold; and currently report to inventories that fall far below the quality of the TRI database.

By adding the industry to the TRI, EPA would make available to the public a vast amount of data that matters to the health of individuals, the planning of communities, and the decision making of local, state, and federal governments. We believe there to be little question that the oil and gas extraction industry is an excellent candidate for addition to the TRI.

If you have any questions regarding this letter or the attached data, please do not hesitate to get in touch. Thank you for your attention to and consideration of this important issue.

Respectfully submitted,

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Table 2: Top Twenty Emissions of TRI-Listed Chemicals in the States Investigated

				2-Year	Average
State				Total	Annual
		Facility (Operator)	Pollutant	Emissions	Emissions
				(lbs.)	(lbs.)
		Parachute WMF (WPX Energy		(103.)	(103.)
1	со	Rocky Mountain, LLC)	Methanol	814,498.00	407,249.00
1	100	Piceance Creek, Rangely	Wethanor	014,430.00	407,243.00
2	со	(RN Industries)	Methanol	775,336.00	387,668.00
		Rulison Water Management (WPX		-	
3	со	Energy Rocky Mountain, LLC)	Methanol	663,988.00	331,994.00
		Parachute WMF (WPX Energy			
4	со	Rocky Mountain, LLC)	Xylenes	341,145.18	170,572.59
		Parachute WMF (WPX Energy			
5	СО	Rocky Mountain, LLC)	Toluene	310,539.74	155,269.87
		Hunter Mesa (Encana Oil & Gas			
6	СО	(USA) Inc.)	Methanol	294,600.00	147,300.00
		Pikes Peak Gas Plant (Sandridge			
7	TX	Midstream, Inc.)	N-Hexane	211,121.80	105,560.90
		Piceance Dev. Project (Enterprise			
8	со	Gas Processing, LLC)	Toluene	187,560.54	93,780.27
		Central Compressor Station			
9	TX	(Anadarko E&P Company LP)	Formaldehyde	176,168.00	88,084.00
		Rulison Water Management (WPX			
10	СО	Energy Rocky Mountain, LLC)	Xylenes	169,178.46	84,589.23
		Parachute WMF (WPX Energy		450 770 07	75 205 44
11	со	Rocky Mountain, LLC)	Benzene	150,770.27	75,385.14
12	60	Middle Fork Compressor Station	Talvana	140 741 10	74 270 50
12	со	(Encana Oil & Gas (USA) Inc.)	Toluene	148,741.19	74,370.59
13	TX	Pegasus Gas Plant (DCP Midstream, LP)	Formaldahuda	142 600 00	71,300.00
15	1^	Middle Fork Compressor Station	Formaldehyde	142,600.00	71,300.00
14	со	(Encana Oil & Gas (USA) Inc.)	Xylenes	136,044.22	68,022.11
14		East Texas Gas Plant (DCP	Ayleries	130,044.22	00,022.11
15	TX	Midstream, LP)	Benzene	134,990.00	67,495.00
13	17	Rawlins Plant (Colorado Interstate	Denzene	134,330.00	07,433.00
16	WY	Gas Co.)	Formaldehyde	133,270.57	66,635.28
		Piceance Dev. Project (Enterprise	•		
17	со	Gas Processing, LLC)	Xylenes	118,051.62	59,025.81
	Shaeffer Ranch Facility (Greenback		-		
18	со	Produced Water Recovery, LLC)	Methanol	113,315.17	56,657.58
		East Painter Facility (Merit Energy			
19	WY	Co.)	Formaldehyde	107,200.00	53,600.00
		Keystone Gas Plant (Southern			
20	TX	Union Gas Services, Ltd.)	Formaldehyde	105,436.20	52,718.10

² See, e.g., Addition of Facilities in Certain Industry Sectors; Toxic Chemical Release Reporting; Community Right-to- Know, 61 Fed. Reg. 33,588, 33,592 (June 27, 1996)

http://www.dep.state.pa.us/dep/deputate/airwaste/aq/emission/emission_inventory.htm (last visited Jan. 28, 2014).

¹ See Attachment 1 for full description of our methodology.

³ See Addition of Facilities in Certain Industry Sectors; Revised Interpretation of Otherwise Use; Toxic Chemical Release Reporting; Community Right-to- Know, 62 Fed. Reg. 23,834, 23,836 (May 1, 1997).

⁴ 61 Fed. Reg. at 33,594.

⁵ 62 Fed. Reg. at 23,836.

⁶ 61 Fed. Reg. at 33,592.

⁷ *Id.* at 33,594.

⁸ *Id*.

⁹ See Attachment 2 for facilities that reported emitting over 10,000 pounds of at least one of the representative TRI-listed chemicals in two consecutive years. As discussed in Attachment 1, we selected ten representative TRI-listed chemicals (or chemical groups) for this report: 2,2,4-trimethylpentane, benzene, ethylbenzene, ethylene, ethylene glycol, formaldehyde, hexane, methanol, toluene, and xylenes.

¹⁰ See Attachment 3 for facilities that reported emitting over 10,000 pounds of at least one representative TRI-listed chemical in at least one year.

¹¹ As indicated by the asterisks in Table 1, only one year of data is available for facilities in the oil and gas extraction industry in Pennsylvania. Pennsylvania only began to require reporting for ninety-nine owners/operators involved in unconventional natural gas development for the 2011 reporting year, but it did not report this data to the National Emissions Inventory. *See* Press Release, PA DEP, DEP to Collect Air Emissions Data about Natural Gas Operations (Dec. 27, 2011) (on file with EIP). It released this data in early 2013 as a separate "Unconventional Natural Gas Emissions Inventory," and has since expanded these reporting requirements to owners/operators of midstream and processing facilities involved in conventional gas development. *See* Press Release, PA DEP, DEP Releases Unconventional Drilling Emissions Inventory Data (Feb. 12, 2013) (on file with EIP); PA DEP, News: DEP to Gather Air Emissions Data about Natural/Coal Bed Methane Gas Operations,

¹² See, e.g., EPA, Toxic Chemical Release Inventory Reporting Forms and Instructions Revised 2012 Version 17, 25 (2013), available at

http://www2.epa.gov/sites/production/files/documents/ry2012rfi.pdf.

¹³ See Right-to-Know Network, Keystone Plant Risk Management Plan, http://www.rtknet.org/db/rmp/rmp.php?facility_id=100000162628&database=rmp&detail=3&da type=T (last visited Jan. 28, 2014).

¹⁴ See Right-to-Know Network, Pegasus Gas Plant Risk Management Plan, http://www.rtknet.org/db/rmp/rmp.php?facility_id=100000064495&database=rmp&detail=3&da type=T (last visited Jan. 28, 2014).

¹⁵ See Right-to-Know Network, CIG Rawlins Station Risk Management Plan, http://www.rtknet.org/db/rmp/rmp.php?facility_id=100000054068&database=rmp&detail=3&da type=T (last visited Jan. 28, 2014).

¹⁷ See Right-to-Know Network, Discovery Producer Services: Larose Cryogenic Plant Risk Management Plan,

http://www.rtknet.org/db/rmp/rmp.php?facility_id=100000113076&database=rmp&detail=3&datype=T (last visited Jan. 28, 2014).

¹⁸ 61 Fed. Reg. at 33,592.

²¹ See, e.g., EPA, Office of Compliance Sector Notebook Project: Profile of the Oil and Gas Extraction Industry 31-32, 40 (2000).

²² See NAICS Ass'n, 21112 Natural Gas Liquid Extraction,

http://www.naics.com/censusfiles/ND211112.HTM (last visited Jan. 28, 2014); EPA, Is My Facility's Six-Digit NAICS Code a TRI-Covered Industry?, http://www2.epa.gov/toxics-release-inventory-tri-program/my-facilitys-six-digit-naics-code-tri-covered-industry (last visited Jan. 28, 2014).

²³ See NAICS Ass'n, 325110 Petrochemical Manufacturing, http://www.naics.com/censusfiles/ND325110.HTM (last visited Jan. 28, 2014); NAICS Ass'n, 21112 Natural Gas Liquid Extraction, http://www.naics.com/censusfiles/ND211112.HTM (last visited Jan. 28, 2014).

²⁴ See Wyoming Dep't of Envtl. Quality, 2011 Triennial Minor Source Emission Inventory, http://deq.state.wy.us/aqd/Triennial%20Minor%20Source%20Emission%20Inventory_2011.asp (last visited Jan. 28, 2014).

²⁵ See note 9, supra.

²⁷ Public information requests on file with EIP.

¹⁶ See Right-to-Know Network, Meeker Cryogenic Plant Risk Management Plan, http://www.rtknet.org/db/rmp/rmp.php?facility_id=100000199821&database=rmp&detail=3&datype=T (last visited Jan. 28, 2014).

¹⁹ See EPA, Facility Profile Report: Fullerton Gas Plant, TRI Facility ID No.
7971WFLLRT751NF (Reporting Year 2012); EPA, Facility Profile Report: Keystone Gas Plant, TRI Facility ID No. 79745KYSTN6297C (Reporting Year 2012); EPA, Facility Profile Report: Targa Midstream Services LLC – Mont Belvieu, TRI Facility ID No. 77580DYNGY1319H (Reporting Year 2012); EPA, Facility Profile Report: DCP Goldsmith Plant, TRI Facility ID No. 7974WDCPGL16WES (Reporting Year 2012); EPA, Facility Profile Report: Sunray Gas Plant, TRI Facility ID No. 7908WSNRYG11571 (Reporting Year 2012); EPA, Facility Profile Report: Coyanosa Gas Plant, TRI Facility ID No. 79730CYNSG4259M (Reporting Year 2012). All facility profile reports were accessed via the TRI Explorer website. See EPA, TRI Explorer: Release Reports, http://iaspub.epa.gov/triexplorer/tri_release.facility (accessed Jan. 28, 2014).
²⁰ See 42 U.S.C. § 11023(b)(1)(A); Expediting Community Right-to-Know Initiatives, Memorandum for the Administrator of the Environmental Protection Agency and the Heads of Executive Departments and Agencies, 60 Fed. Reg. 41,791 (Aug. 8, 1995).

²⁶ See Wyoming Dep't of Envtl. Quality, Actual Emissions, http://deq.state.wy.us/aqd/Actual%20Emissions.asp (last visited Jan. 28, 2014).